

EDUCATION

University of Texas at Austin / M.S. in Computer Science

Aug. 2023 - Dec. 2024

- Notable coursework: Deep learning, Machine Learning, Natural Language Processing, Artificial Intelligence, Optimization

University of California at Berkeley / B.A. in Data Science

National Merit Scholar

- Notable coursework: Artificial Intelligence, Machine Learning, Data Analytics, Algorithms, Data Structures, Data Mining

CERTIFICATIONS

AWS Certified Solutions Architect Associate

Dec 2024, Amazon Web Services

Oracle Cloud Infrastructure Generative AI Professional

Jun 2024, Oracle Corporation

Oracle Cloud Infrastructure AI Certified Foundations Associate

Jun 2024, Oracle Corporation

EXPERIENCE

Smarsh / Software Engineer

Remote / Jun. 2021 - Jul. 2022

- Integrated new features into Smarsh's Conduct Surveillance application, utilizing pre-trained NLP and ML models to identify misconduct in electronic and voice communications for major global financial institutions.
- Resolved 8 production issues escalated from the support team, evoking company recognition and improving relationships with 3 major at-risk banking clients.
- Constructed more robust & comprehensive Groovy testing for 7 transformers and 12 pipelines used in production.
- Collaborated with product managers and software engineers to optimize the Jira workflow, eliminating blockers and enhancing team productivity.
- Strengthened code quality through regular code reviews and documentation for both new and existing features.

University of California at Berkeley / Researcher for the Cohen Research Group

Berkeley, CA / Feb. 2019 - Aug. 2019

- Launched efforts to replace an expensive climate model run with ML model predictions, improving efficiency.
- Engineered geolocation data to enhance the resolution of NO2 level measurements recorded by NASA's Aura satellite.
- Aligned 47K pixels with Aura's OMI pixels, enabling tailored geographical data correlation for ML model development.

University of Texas at Austin / Researcher in Computational Chemistry

Austin, TX / Jun. 2016 - Aug. 2016

- Simulated carbon monoxide binding on gold-palladium alloy nanoparticles during oxygen reduction reactions (ORR).
- Created molecular visualizations to communicate research findings on energy production efficiency in catalyst materials.

PROJECTS

Additional projects available at: dannysiudata.com

POS-Tagger Model / Python

- Trained an LSTM for POS-tagging using mini-batch stochastic gradient descent on pre-trained GloVe embeddings.
- Improved model accuracy by implementing a bi-directional LSTM, adding dropout layers, and utilizing the 500,000 most common 300-dimensional word embeddings.

SKILLS

Languages: Python, Java, SQL, PyTorch, Tensorflow, Keras, Scikit-learn, Pandas, Groovy, R, HTML, CSS

Tools and Frameworks: Linux, Git, Agile, Kanban, Jupyter, Bash

Data Modeling Expertise: Deep Learning, Neural Networks, Machine Learning, Data Visualization, Feature Engineering, Clustering, Classification, Prediction, Sentiment analysis, Data analytics